

Amendments to the Drawings

The attached sheet of drawings includes changes to FIGS. 1 and 2. A legend has been added to FIG. 1, indicating that it is prior art. Additionally, reference sign 12 has been added to FIG. 2. This sheet replaces the original sheet of drawings.

Attachment: Replacement sheet 1.

Remarks

The Office action mailed October 22, 2007 has been carefully reviewed and considered. New claims 17 and 18 have been added. Claim 1 has been amended. Applicants respectfully request entry of these amendments. Claims 1-7 and 9-18 are pending. The 35 U.S.C. § 102(b) and § 103(a) rejections are respectfully traversed for the reasons set forth below.

Claims 1, 4-7, 15, and 16

Claims 1, 4-7, and 15-16 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Saitamakiki. The present claim 1 recites a bearing arrangement having “a non-zero torque between the ball and housing within a predetermined range prior to being installed in the interference fit hole.” Examiner Hannon argued that “the ‘predetermined range’ of torque of claim 1 is inherently anticipated by the arrangement of Saitamakiki.” However, the ball joint of Saitamakiki does not have a non-zero torque between a ball and a housing prior to being fit in an interference fit hole, and thus cannot anticipate claim 1.

In contrast to the present claim 1, the disclosure of Saitamakiki makes it clear that there is zero torque between the ball and the housing. As one of ordinary skill in the art appreciates, for a torque to exist between two structures, there must be contact between those structures; i.e. there can be no gap or space between two structures. In the ball joint of Saitamakiki, lubricating material 20 is placed between the ball 6 and the bearing housing 9. *See* FIG. 1 of Saitamakiki. “A lubricating material 20 such as oil or grease is filled in the ends of said bearing housing, the leakage of oil being prevented by the dust cover 13.” Saitamakiki, page 2, lines 38-41. Thus, some small gap must exist between the ball 6 and bearing housing 9 and/or between the ball 6 and the bearing block 7 to allow the lubricating material 20 to be placed. Hence, there is no torque between the ball 6 and bearing housing 9 or between the ball 6 and the bearing block 7 prior to being installed in an interference fit hole.

Additionally, Saitamakiki’s use of a complicated, multi-part housing structure also suggests that the ball joint experiences zero torque prior to being installed in an interference-fit hole. The ball joint of Saitamakiki consists of a two-part bearing block 7 which “is inserted in the bearing housing 9 and retained by check ring 12 so that it does not fall out.” Saitamakiki, page 2, lines 32-37. This suggests that the ball 6 will not be tight-fitting in the ball joint because a check ring 12 is required to retain the components in the housing. Applicants understand that

the ball loosely fits in the bearing housing 9 without any torque between the ball and the bearing block 7. Otherwise, check ring 12 would not be required. In contrast to the present claim 1, this indicates zero torque between the bearing housing and the ball in Saitamakiki.

Accordingly, for at least these reasons, claim 1 and dependent claims 4-7 and 15-16 are not anticipated by Saitamakiki and applicants respectfully request that the rejection be withdrawn.

Claims 2-3 and 12-14

Claims 2-3 and 12-14 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Saitamakiki. Claims 2-3 and 12-14 depend from claim 1. Saitamakiki does not teach or suggest all of the elements of claim 1, and thus cannot render obvious dependent claims 2-3 or 12-14. As discussed above, Saitamakiki does not teach or suggest a torque between the ball and housing within a predetermined range prior to being installed in the interference fit hole. Saitamakiki provides no motivation to alter its teachings for the purposes described in the present application. Saitamakiki, as discussed, is concerned with absorbing shock, and nowhere mentions any desire to reduce effects of interference fitting on a ball. Accordingly, for at least these reasons, claims 2-3 and 12-14 are not obvious in view of Saitamakiki, and applicants respectfully request that the rejection be withdrawn.

Should any questions remain regarding this application, Examiner Hannon is invited to contact the undersigned attorney at the phone number below.

Respectfully submitted,

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